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CHRISTOPHER DEVRIES		EXAMINER		
General Motors Corporation		PAUL, DISLER		
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/679,598	Applicant(s) MC CALL ET AL.	
	Examiner Disler Paul	Art Unit 2615	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4; 7-26 is/are pending in the application.
4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-4; 7-26 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|--|
| 1) ☒ Notice of References Cited (PTO-892) | 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) ☐ Notice of Informal Patent Application |
| 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date ____ | 6) ☐ Other: ____ |

DETAILED ACTION

Response to Amendment

The examiner have considered the applicant's argument and clarification and have agreed with the applicant on the claim 16, thus new office action non-final will be written in regard to a new prior art.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

2. Claims 1-4 are rejected under 35 U.S.C. 102(a) as being anticipated by Himmelstein ("6,946,107 B1").

Re claim 1, Himmelstein et al. discloses a sound processing system for use in an automotive vehicle of the type which includes at least one door and door-lock, said processing system comprising at least one sound sensor coupled to said vehicle for receiving sound external to said vehicle ("fig.1/50; col.2 line 50-51"); and a sound processor coupled to said at least one sound sensor for comparing said sound to a first set of characteristics corresponding an audible vehicle access code ("fig.1(30,32,44);col.1

line 65-67/voice is authenticated for access to vehicle with comparison from (32); col. 3 line 42-49"); and configuring to unlock said door-lock when said sound substantially match said audible vehicle access code ("col.1-2 line 66 up to line 5;fig.3"), while Himmelstein is silent regarding the door lock module, he did disclose of the door lock/unlock ("col.2 line 4"), thus with the above disclosure it is inherent that there must exist of the existence of the door lock module.

Re claim 2, a sound processing system according to claim 1 wherein said at least one sound sensor is a microphone ("fig.1(50)").

Re claim 3, a sound processing system according to claim 2 further comprising a user input coupled to said sound processor and located substantially on said vehicle's exterior for activating said sound processor when said vehicle is not occupied ("fig.1(22); col.3 line 1-8").

Re claim 4, a sound processing system according to claim 3 wherein said sound processor is activated for a predefined time period("col.6 line 12-16").

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 7-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Himmelstein ("6,496,107 B1") and further in view of Carter ("2002/0150262 A1").

Re claim 7, a sound processing system according to claim 1 wherein said sound is further configured to compare said sound to a second predetermine set of characteristic ("col.4 line 47-65/lock and audio functions"), while Himmelstein disclose of the above, he fail to disclose of the characteristic is corresponding to an emergency alert. However, Carter did disclose of the above wherein the characteristic is corresponding to an emergency traffic alert ("page 1[0013]") for the purpose of enabling the occupant of a vehicle important emergency sounds outside of the vehicle. Thus, taking the combined teaching of Himmelstein et al. and Carter as a whole, it would have been obvious for one of the ordinary skill in the art to modify Himmelstein et al. by incorporating the limitation of the characteristic is corresponding

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to an emergency traffic alert for the purpose of enabling the occupant of a vehicle important emergency sounds outside of the vehicle.

Re claim 8, a sound processing system according to claim 7 further comprising a vehicle occupancy sensor coupled to said sound processor ("fig.1/(122,158,30), col.7 line 55-66/in addition may also act as an occupancy sensor"), while the combined teaching of Himmelstein and carter as a whole, is silent in regard to the limitation of the sound processor configure to compare said sound signal to said set of predetermined characteristic when said vehicle occupancy sensor indicates the vehicle is occupied and to said second set of predetermined characteristic when said vehicle occupancy sensor indicates that the vehicle is unoccupied. However, Himmelstein did disclose of the following: sound processor may perform certain tasks only during occupancy ("col.8 line 1-8") and further the sound processor may perform task relating to non-occupancy in vehicle ("col.2 line 2-7") with the above disclosure, there must exist such of the comparison of said sound signal to said set of predetermined characteristic when said vehicle occupancy sensor indicates the vehicle is occupied and to said second set of predetermined characteristic when said vehicle occupancy sensor indicates that the vehicle is unoccupied

Re claim 9, a sound processing system according to claim 8 wherein said emergency traffic alert is a siren ("Carter, page 1 [0013] line 8-9").

Re claim 10, a sound processing system according to claim 6, However, the combined teaching of Himmelstein et al. and Carter as a whole, fail to disclose of the further limitation wherein the user input comprises at least one door handle. However, official notice is taken that the limitation of the user input comprises at least one door handle is commonly known in the art, thus it would have been obvious for one of the ordinary skill in the art to modify Himmelstein et al. by incorporating the limitation of the user input comprises at least one door handle for providing the additional feature of manual user entry to the vehicle.

Re claim 11, a sound processing system according to claim 10 further comprising a feedback generator for providing a user recognizable response when at least a part of said access code is recognized by said processor ("col.6 line 18-35; fig.1 (42,46)").

Re claim 12, a sound processing system according to claim 11, However, himmerlstein fail to disclose of the further limitation wherein said feedback generator comprises a display. However, carter disclose of a system wherein the feedback generator comprises a

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display("Carter, page 3 [0024] line 5-6; page 2 [0018]") for the purpose of notifying distracted occupant in vehicle of occurrence of detected sound, thus taking the combined teaching of Himmerlstein et al. and Carter as a whole, it would have been obvious for one of the ordinary skill in the art to modify Himmerlstein et al. by incorporating the feedback generator comprises a display for the purpose of notifying distracted occupant in vehicle of occurrence of detected sound.

Re claim 13, a sound processing system according to claim 11 wherein said feedback generator comprises a light-emitting diode ("see claim 12 rejections").

Re claim 14, a sound processing system according to claim 11 wherein said feedback generator comprises a sound generator ("see claim 11 rejection").

Re claim 15, a sound processing system according to claim 8, However, the combined teaching of teaching of Himmelstein et al. and Carter as a whole, fail to disclose of the further limitation wherein the at least one microphone comprises at least a first microphone located proximate a front end of said vehicle and at least a second microphone located proximate a back end of said vehicle. However, Carter disclose of a system wherein the further limitation wherein the at least one microphone comprises at least a first microphone located proximate a front end of said vehicle and at least a second microphone

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located proximate a back end of said vehicle ("Carter, Page 2[0014]
line 1-8") for the purpose of detecting or capturing of different sounds at various locations of the vehicle. Thus, taking the combined teaching of Himmelstein and carter (both old & new teaching) as a whole, it would have been obvious for one of the ordinary skill in the art to modify Himmelstein et al. and Carter as a whole, by incorporating the further limitation wherein the at least one microphone comprises at least a first microphone located proximate a front end of said vehicle and at least a second microphone located proximate a back end of said vehicle for the purpose of detecting or capturing of different sounds at various locations of the vehicle.

Re claim 16, Himmelstein disclose of a sound processing system for use on an automotive vehicle of the type which includes at least one door a door handle, said system comprising: at least one sound sensor coupled to the exterior of said vehicle for receiving an external sound ("fig.1(50)"; a vehicle occupancy sensor for indicating when said vehicle is occupied ("fig.1 ((122,158))"; an alert generator for notifying an occupant of said vehicle ("fig.1(42,46)"; a door control module coupled to said door-lock for unlocking said door ("see claim 1 rejection"); and a sound processor configured to receive said external sound and coupled to said vehicle occupancy sensor

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("fig.1(122,158), (50,30)"), said alert generator ("fig.1/42,46"), and said door control module for comparing said sound to a first set of characteristic if said vehicle is occupied and to a second set of characteristics if said vehicle is unoccupied ("see claim 8 rejection"), said sound processor for activating said alert generator if said vehicle is occupied and said sound substantially matches said first set ("fig.1/(122,158); table 1, col.4 line 55 up to col.5 line 5/passenger have priority when to generate sound when voice match particular commands during occupancy") and for activating said door control module if said sound substantially matches said second set and the vehicle is unoccupied ("col.2 line 1-7").

While, Himmelstein disclose of the above limitation, he fail to further disclose of the notifying an occupant of said vehicle when said external sound is an emergency signal. However, Carter disclose of a system wherein the notifying an occupant of said vehicle when said external sound is an emergency signal ("fig.1/(25,20)") for the purpose of enabling the occupant of a vehicle important emergency sounds outside of the vehicle. Thus, taking the combined teaching of Himmelstein et al. and Carter as a whole, it would have been obvious for one of the ordinary skill in the art to modify Himmelstein et al. by incorporating the limitation of the characteristic is corresponding to an emergency traffic alert for the purpose of enabling the occupant of a vehicle important emergency sounds outside of the vehicle.

Re claim 17, has been analyzed and rejected with respect to claim 2 respectively.

Re claim 18, a sound processing system according to claim 17, However, the combined teaching of Himmelstein et al. and Carter as a whole, fail to disclose of the further limitation wherein said sound processing system is activated upon actuation of said door handle. But, official notice is taken that the limitation of wherein the wherein said sound processing system is activated upon actuation of a component in a door handle is commonly known in the art. Thus, taking the combined teaching of Himmelstein and Carter as a whole, it would have been obvious for one of the ordinary skill in the art to modify Himmelstein and carter as a whole, by incorporating the further limitation wherein sound processing system is activated upon actuation of a component in a door handle for the purpose of providing wake up signals for a short period of time.

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Re claims 19-20, have been analyzed and rejected with respect to claim 4-5 respectively.

Re claim 21, has been analyzed and rejected with respect to claim 8 respectively.

Re claims 22, have been analyzed and rejected with respect to claim 11 respectively.

Re claims 23, have been analyzed and rejected with respect to claim 12 respectively.

Re claim 24, has been analyzed and rejected with respect to claim 15 respectively.

Re claim 25, Himmelstein disclose of a method for providing keyless entry to an automotive vehicle and for alerting an occupant of said vehicle of an external emergency sound, said vehicle having at least one door equipped with a door lock and door access mechanism ("col.1-2"), said method comprising receiving an external sound ("fig.1(50)"); comparing said sound with a first and second sets of

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characteristics, said first set corresponding to an emergency sound and said second set corresponding to an audible access code; generating a user recognizable alert if said sound substantially matches said first set and unlocking said door if said sound substantially matches said second set ("see claim 16 rejections").

Re claim 26, a method according to claim 25 wherein said user recognizable alert is a visual alert ("see claim 12 rejection").

Re claim 27, a method according to claim 25 further comprising: determining if said vehicle is occupied; and comparing said sound with said first set if said vehicle is occupied and with a second set if said vehicle is unoccupied ("see claim 16 rejections").

Conclusion

1. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

The following prior art disclose of processor with voice activating device for opening doors Lee et al. ("6,639,512 B1") and Petrovic et al. ("6,737,957 B1) and schneider et al. ("4,856,072").

Contact

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Disler Paul whose telephone number is 571-270-1187. The examiner can normally be reached on 7:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chin Vivian can be reached on 571-272-7848. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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